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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,367	04/01/2004	Trung V. Le	10301US02	8235
7590	08/12/2004		EXAMINER VU, PHUONG T	
Imation Corp. P.O. Box 64898 St. Paul, MN 55164-0898			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/815,367	Applicant(s) LE ET AL.	
	Examiner Phuong T. Vu	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6-28-04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 7-13,16 are rejected under 35 U.S.C. 102(b) as being anticipated by Klatt et al. (US 6,097,605). Regarding claim 1, the reference discloses an apparatus comprising a housing defining a slot to receive one of at least four different types of removable memory cards (see figure 4, bottom five embodiments), wherein the slot includes a central region having a width to receive a memory card of a first type, first outer regions (upper side wall sections of slot) that extend the width of the central region to a second width to receive a memory card selected from a second type of memory card and a third type of memory card, and second outer regions (lower side wall sections of slot) that extend the width of the central region to a third width to receive a memory card of a fourth type; and inherently has a plurality of electrically conductive contact areas to provide electrical contact with the four different types of memory cards.

Regarding claim 7, wherein the housing has dimensions substantially

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conforming to a size specification of a standard PCMCIA removable memory card, which would conform to the specifications for Type II CompactFlash memory cards.

Regarding claim 8, it appears that the central region of the slot has a height of approximately 2.8 mm and width of at least approximately 24 mm to allow insertion of the memory cards.

Regarding claim 9, it appears that the width of the central region must be at least approximately 21.5 mm, wherein the first outer regions extend the width of the central region to at least approximately 24 mm, and wherein the second outer regions extend the width of the central region to at least approximately 37 mm for the memory cards to be inserted.

Regarding claim 10, the apparatus inherently further comprises an electrically conductive interface for coupling to a memory card reader for the apparatus to function as intended.

Regarding claim 11, the must apparatus further comprise an electrically conductive interface for coupling the apparatus to a connector for one of a Personal Computer Memory Card International Association (PCMCIA) bus, a Universal Serial Bus (USB) interface, a serial interface, a parallel interface, and a Small Computer System Interface (SCSI) interface for the apparatus to function as intended.

Regarding claim 12, the apparatus must further comprise circuitry for converting signals received from the contact areas for the apparatus to function as intended.

Regarding claim 13, wherein the circuitry converts the signals to conform to one

of a Personal Computer Memory Card International Association (PCMCIA) bus, a Universal Serial Bus (USB), a serial interface, a parallel interface, and a small computer system interface (SCSI) for the apparatus to function as intended.

Regarding claim 16, wherein the apparatus comprises an adapter or a memory card reader.

3. Claims 1-2, 6-7, 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Yen (US 6,612,492B1). Regarding claim 1, the reference discloses an apparatus comprising a housing 44 defining a slot comprising 412, 413 to receive one of at least four different types of removable memory cards (see figure 7), wherein the slot includes a central region having a width to receive a memory card of a first type, first outer regions (side wall sections of slot 412) that extend the width of the central region to a second width to receive a memory card selected from a second type of memory card and a third type of memory card, and second outer regions (side wall sections of slot 413) that extend the width of the central region to a third width to receive a memory card of a fourth type; and a plurality of electrically conductive contact areas 2 to provide electrical contact with the four different types of memory cards.

Regarding claim 2, at least a portion of each of the contact areas is disposed within the central region of the slot.

Regarding claim 6, an insertion stop (side wall sections of slot 411) is positioned within the central region of the slot to limit an insertion depth of a memory card of a predetermined width or greater.

Regarding claim 7, the housing has dimensions substantially conforming to a size specification of a CompactFlash removable memory card.

Regarding claim 10, the apparatus further comprises an electrically conductive interface for coupling to a memory card reader.

Regarding claim 11, the apparatus further comprises an electrically conductive interface for coupling the apparatus to a connector for one of a Personal Computer Memory Card International Association (PCMCIA) bus, a Universal Serial Bus (USB) interface, a serial interface, a parallel interface, and a Small Computer System Interface (SCSI) interface for the apparatus to function as intended.

Regarding claim 12, the apparatus must further comprising circuitry for converting signals received from the contact areas for the device to function as intended.

Regarding claim 13, wherein the circuitry converting the signals must conform to one of a Personal Computer Memory Card International Association (PCMCIA) bus, a Universal Serial Bus (USB), a serial interface, a parallel interface, and a small computer system interface (SCSI) for the apparatus to function as intended.

Regarding claim 14, wherein the plurality of contact areas comprises a first contact area for electrically coupling to a Smart Media memory card; a second contact area for electrically coupling to a Memory Stick memory card; and a third contact area for electrically coupling to a Secure Digital memory card or a MultiMedia memory card.

Regarding claim 15, wherein the housing defines the width of the central region to receive a Memory Stick removable memory card, wherein the first outer regions

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extend the width of the central region to receive at least one of a MultiMedia removable memory card and a Secure Digital removable memory card, and wherein the second outer regions extend the width of the central region to receive a Smart Media removable memory card.

Regarding claim 16, the apparatus comprises an adapter or memory card reader.

Regarding claim 17, the reference discloses an apparatus comprising a plurality of electrically conductive contact areas disposed within a cavity to provide electrical contact with at least four different types of removable memory cards, wherein the cavity includes: a central region having a width to receive a Memory Stick removable memory card, first outer regions that extend the width of the central region to a second width to receive a MultiMedia removable memory card or a Secure Digital removable memory card, and second outer regions that extend the width of the central region to a third width to receive a Smart Media removable memory card.

Regarding claim 18, the reference discloses a system comprising an adapter having a slot to receive one of at least four different types of removable memory cards, wherein the slot includes a central region having a width to receive a memory card of a first type, first outer regions that increase the width of the central region to a second width to receive a memory card selected from a second type of memory card or a third type of memory card, and second outer regions that increase the width of the central region to a third width to receive a memory card of a fourth type; and a computing device having a port to receive the adapter.

Regarding claim 19, wherein the port of the computing device inherently comprises one of a Personal Computer Memory Card International Association (PCMCIA) interface, a Universal Serial Bus (USB) interface, a serial interface, a parallel interface, and a Small Computer System Interface (SCSI) interface for the apparatus to function as intended.

Regarding claim 20, the reference discloses an apparatus comprising a housing defining a slot with a plurality of differently sized regions to receive at least four different types of memory cards, wherein the plurality of differently sized regions of the slot includes a first region having a first width to receive a memory card of a first type, a second region having a second width greater than the first width, the second width being sized to receive a memory card selected from a second type of memory card and a third type of memory card, and a third region having a third width greater than the first width and greater than the second width, the third width being sized to receive a memory card of a fourth type; and a plurality of electrically conductive contact areas to provide electrical contact with the four different types of memory cards.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klatt et al. (US 6,097,605). Regarding claim 2, the reference does not provide details of

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the contacts for the embodiments shown in figure 4. However, it would have been obvious to those skilled in the art at the time the invention was made that at least a portion of each of the contact areas would be disposed within the central region of the slot so that inserted memory cards may be readily contacted.

Regarding claim 3, the reference teaches providing a bias mechanism coupled to the housing to bias a memory card toward the contact areas (see figures 2a-2b which are directed to a different embodiment not relied upon in the rejection of independent claim 1). The reference does not provide details of the contacts for the embodiments shown in figure 4. However, it would have been obvious to those skilled in the art at the time the invention was made to provide a bias mechanism coupled to the housing to bias an inserted memory card toward the contact areas to reliably secure the memory card and ensure good electrical contact between the memory card and the contact areas of the apparatus.

Regarding claim 4, as noted above it would have been obvious to provide a bias mechanism coupled to the housing within the central region of the slot. The reference shows that the bias mechanism biases memory cards toward a first side of the central region of the slot and toward a second side opposing the first side to retain the card in the central region.

Regarding claim 5, the reference is silent about how far the memory is moved due to the bias mechanism. The bias mechanism may bias a memory card to move the memory card a distance of at least approximately 3.5 mm from a second side of the central region of the slot. Alternatively, it has been decided that where the general

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conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 8, one skilled in the art would recognize that the central region of the slot should have a height of approximately 2.8 mm and width of at least approximately 24 mm to allow insertion of the memory cards. Alternatively, it has been decided that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 9, the width of the central region must be at least approximately 21.5 mm, wherein the first outer regions extend the width of the central region to at least approximately 24 mm, and wherein the second outer regions extend the width of the central region to at least approximately 37 mm for the memory cards to be inserted. Alternatively, it has been decided that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

6. Claims 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by, or in the alternative under 35 U.S.C. 103(a) as being unpatentable over Yen (US 6,612,492B1). Regarding claim 8, it appears that the central region of the slot should have a height of approximately 2.8 mm and width of at least approximately 24 mm to allow insertion of the memory cards. Alternatively, it has been decided that where the general conditions

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of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 9, it appears that the width of the central region must be at least approximately 21.5 mm, wherein the first outer regions extend the width of the central region to at least approximately 24 mm, and wherein the second outer regions extend the width of the central region to at least approximately 37 mm for the memory cards to be inserted. As noted above, it has been decided that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (571) 272-2111. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S. Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PTVu
Patent Examiner

8/5/04